

CERTIFIED MAIL # 7017 2680 0000 8845 9991

April 29, 2019

Alaska Department of Environmental Conservation
Air Permits Program
610 University Avenue
Fairbanks, Alaska 99709-3643
Attn: Compliance Technician

BP Exploration (Alaska) Inc.
900 East Benson Boulevard
P.O. Box 196612
Anchorage, Alaska 99519-6612
(907) 561-5111

ADEC AIR QUALITY

ORIGINAL

MAY 03 2019

FAIRBANKS

First Quarter 2019 Facility Operating Reports
Required by AQC Permits to Operate for BPXA Operated Facilities

Dear Compliance Technician:

In accordance with the Air Quality Control Permits to Operate for the BPXA Operated Facilities, please find attached the following reports:

<u>Facility</u>	<u>Permit No.</u>	<u>Required Report</u>
Gathering Center # 1 (GC-1)	AQC Operating Permit No. 182TVP01, Revision 1 As required by Condition 5.1.d, copies of the records of fuel gas sulfur content are attached, if applicable. As required by Condition 11.3, copies of the records of flue gas content of CO and O ₂ are attached, if applicable. As required by Condition 28.1 and 34.4, copies of visible emission observation results are attached, if applicable. As required by Condition 49.5, a public complaint log is attached, if applicable. As required by Condition 67.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report
Gathering Center # 2 (GC-2)	AQC Operating Permit No. 183TVP01, Revision 2, and AQ0183MSS01 As required by Condition 5.1.d, copies of the records of fuel gas sulfur content are attached, if applicable. As required by Condition 25.1 and 31.4, copies of visible emission observation results are attached, if applicable. As required by Condition 46.5, a public complaint log is attached, if applicable. As required by Condition 64.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report

<u>Facility</u>	<u>Permit No.</u>	<u>Required Report</u>
Gathering Center # 3 (GC-3)	AQC Operating Permit No. 184TVP01, Revision 1, and AQ0184MSS02, Revision 1 As required by Conditions 5.1.d and 21.3, copies of the records of fuel sulfur content are attached, if applicable. As required by Conditions 24.1, 26.2, 29.3, and 64.3, copies of visible emission observation results are attached, if applicable. As required by Condition 45.5, a public complaint log is included, if applicable. As required by Condition 63.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report
Flow Station #2 (FS-2)	AQC Operating Permit No. 268TVP01 As required by Condition 5.1.d, copies of the records of fuel gas sulfur content are attached, if applicable. As required by Condition 24.1 and 28.4, copies of visible emission observation results are attached, if applicable. As required by Condition 43.5, a public complaint log is included, if applicable. As required by Condition 61.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report
Flow Station #3 (FS-3)	AQC Operating Permit No. 269TVP01 As required by Condition 5.1.d, copies of the records of fuel gas sulfur content are attached, if applicable. As required by Condition 26.1 and 30.4, copies of visible emission observation results are attached, if applicable. As required by Condition 45.5, a public complaint log is included, if applicable. As required by Condition 63.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report
Central Compressor Plant (CCP)	AQC Construction/Operating Permit No. 166TVP01 and 166CPT04 As required by Condition 5.1.d, copies of the records of fuel gas sulfur content are attached, if applicable. As required by Condition 24.1 and 28.4, copies of visible emission observation results are attached, if applicable. As required by Condition 43.5, a public complaint log is included, if applicable. As required by Condition 62.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report.
Central Gas Facility (CGF)	AQC Construction/Operating Permit No. 270TVP01 and 270CPT04 As required by Condition 5.1.d, copies of the records of fuel gas sulfur content are attached, if applicable. As required by Condition 25.7, copies of Excess Emissions and Monitoring System Performance Reports are attached, if applicable. As required by Condition 41.1 and 45.4, copies of visible emission observation results are attached, if applicable. As required by Condition 63.5, a public complaint log is included, if applicable. As required by Condition 82.1, copies of any NSPS and NESHAPs reports are attached, if applicable.	1Q 2019 Facility Operating Report

Laboratory analyses for Prudhoe Bay diesel fuel are included as an additional attachment to each report.

The GTS Bath Heater at Z Pad (Minor Permit No. AQ0183MSS01) did not receive any public complaints during the reporting period. Therefore, an Operating Report is not required.

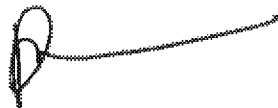
There were no visible emission observations (Reference Method 9) in this quarter.

No source testing was conducted during the reporting period.

The certification statement required by 18 AAC 50.205 is attached.

If you have any questions regarding this submittal, please contact me at 564-4405.

Sincerely,

A handwritten signature in black ink, appearing to be 'Rachel Buckbee', with a long horizontal stroke extending to the right.

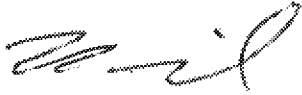
Rachel Buckbee
Air Compliance Advisor

Certification Statement
[Reference: 18 AAC 50.205]

Facility Name: First Quarter 2019 Facility Operating Reports GC1, GC2, GC3, FS2, FS3, CCP, CGF

There were no visible emission observations (Reference Method 9) during the quarter.

"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."



(Responsible Company Official)

4/29/19

Date

Kollin Fencil

Printed Name

Area Operations Manager

Title

BP Exploration (Alaska) Inc.

Company

Gathering Center #2

BP Exploration (Alaska) Incorporated
Gathering Center # 2
Prudhoe Bay, Alaska
Air Quality Permit Numbers AQ0183TVP01 Revision 3 and AQ0183MSS03 Revision 1
Reporting Period from January 1, 2019 to March 31, 2019
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Group I - Gas-Fired Turbines [TVP01 PC 9.3 & 10.2]				Hours of Operation		
EU ID	Tag Number	Source Description	Rating/Size	January	February	March
1	GTRB-02-7000	GE MS 5382C	38.0 Mhp	744.0	872.0	742.9
2	GTRB-02-7001	GE MS 5382C	38.0 Mhp	744.0	872.0	742.9
3	GTRB-W-3152	Solar Mars	12.6 Mhp	Source Removed from Service		
4	GTRB-02-7704A	Sulzer S3	7.91 Mhp	743.0	872.0	743.0
5	GTRB-02-7704B	Sulzer S3	7.91 Mhp	744.0	872.0	743.0
6	GTRB-02-7529	Ruston TB 5000	4.9 Mhp	743.6	872.0	724.9
7	GTRB-02-7504A	Ruston TA 2500	2.5 Mhp	0.6	0.0	0.0
8	GTRB-02-7504B	Ruston TA 2500	2.5 Mhp	481.7	638.9	727.5
Total Group I Fuel Gas Consumption (MMscf)				73.7	71.6	79.9

Group II - Gas-Fired Heaters [TVP01 PC 9.3 & 10.2]				Hours of Operation on Fuel Gas		
EU ID	Tag Number	Source Description	Rating/Size	January	February	March
9	B-02-7000	CB 200800	33.5 MMBtu/hr	82.0	231.3	742.9
10	B-02-7001	CB 200800	33.5 MMBtu/hr	744.0	872.0	742.9
11	B-02-7002	CB 200800	33.5 MMBtu/hr	675.5	441.3	0.5
12	B-02-0001	CB 200500	20.9 MMBtu/hr	838.0	467.0	488.0
13	B-02-0002	CB 200500	20.9 MMBtu/hr	0.0	0.0	0.0
14	B-02-0003	CB 200500	20.9 MMBtu/hr	744.0	656.0	743.0
15	B-02-0004	CB 200500	20.9 MMBtu/hr	0.0	0.0	0.0
16	B-02-0007	BS&B	7.73 MMBtu/hr	743.7	647.4	95.6
17	B-02-0008	BS&B	7.73 MMBtu/hr	744.0	643.6	99.2
Total Group II Fuel Gas Consumption (MMscf) ¹				67.8	49.8	64.7

¹ Fuel gas consumption includes EU ID 36, per AQ0183MSS01

Group II - Dual Fuel-Fired Heaters [TVP01 PC 9.3 & 10.2]				Hours of Operation on Diesel					
EU ID	Tag Number	Source Description	Rating/Size	January	12-Month Total	February	12-Month Total	March	12-Month Total
9	B-02-7000	CB 200800	33.5 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
10	B-02-7001	CB 200800	33.5 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
11	B-02-7002	CB 200800	33.5 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
12	B-02-0001	CB 200500	20.9 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
13	B-02-0002	CB 200500	20.9 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
14	B-02-0003	CB 200500	20.9 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
15	B-02-0004	CB 200500	20.9 MMBtu/hr	0.0	0.0	0.0	0.0	0.0	0.0
Total Group II Diesel Consumption (gallons)				0.0	0.0	0.0	0.0	0.0	0.0

Group III - Diesel Engines [TVP01 PC 8.2, 9.3, 10.2 & MSS03 PC 8.1b]				Hours of Operation					
EU ID	Tag Number	Source Description	Rating/Size	January	12-Month Total	February	12-Month Total	March	12-Month Total
16	GNED-02-0001	Detroit Diesel	737.6 hp	1.9	23.1	0.9	22.8	0.4	21.9
19	GNED-02-0002	Detroit Diesel	737.6 hp	1.2	24.0	0.9	23.8	0.3	22.6
20	GNED-02-0011	Detroit Diesel	737.6 hp	1.5	18.2	1.0	15.0	0.5	14.6
21	PEO-02-0049	Detroit Diesel	280 hp	0.9	13.8	1.2	14.2	1.2	14.0
22	PEO-02-7004	Detroit Diesel	280 hp	1.0	14.0	1.0	14.0	1.0	14.0
23	GNED-02-7500	Detroit Diesel	3,600 hp	1.3	13.2	1.3	12.3	0.7	9.4
24	GTRB-02-8001	Alison Turbine	5,000 hp	0.0	4.7	0.0	3.8	0.0	1.9
Total Group III Diesel Consumption (gallons)				448.4	2,222.3	381.3	2,222.3	217.4	2,222.3

Group IV - Flares [TVP01 PC 10.2]				January	February	March
Total Group IV Flared Gas (MMscf)				50.1	114.2	30.9

Total Facility Consumption [TVP01 PC 10.2]				January	February	March
Fuel Gas Consumption & Flared Gas Volume (MMscf)				182	236	166
Diesel Fuel Consumption (gallons)				448	381	217

Fuel Quality [TVP01 PC 6.1d, 6.2a, 11.2, 22.3c, MSS03 6.1, 7.1b, 7.2d & 9.1]				January	February	March
Fuel Gas H ₂ S Content (ppmv) ¹				30	33	32
Rolling 12-Month Average H ₂ S Content (ppmv)				29	30	30
Diesel Fuel Sulfur Content (wt. % S) ²				0.075	0.075	0.076

¹ ASTM D4810-88

² ASTM D4294, see attached COTU laboratory analysis data sheets

BP Exploration (Alaska) Incorporated
Gathering Center # 2
Prudhoe Bay, Alaska
Air Quality Permit Numbers AQ0183TVP01 Revision 3 and AQ0183MSS03 Revision 1
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Facility Emissions [TVP01 PC 6.2, 7.2 & MSS03 PC 9.1]				Emissions (tons)					
EU ID	Tag Number	Pollutant	12-Month Total Limit	January	12-Month Total	February	12-Month Total	March	12-Month Total
1	GTRB-02-7000	NO _x	1,053 (combined) ¹	33.7	380.8	29.8	380.4	36.4	384.3
		CO	No Limit	1.3	14.6	1.1	14.6	1.4	14.8
		VOC	8.8 (combined) ¹	0.3	3.1	0.2	3.1	0.3	3.1
2	GTRB-02-7001	NO _x	1,053 (combined) ¹	33.7	381.6	29.8	381.3	36.4	385.1
		CO	No Limit	1.3	13.9	1.1	13.9	1.4	14.0
		VOC	8.8 (combined) ¹	0.3	2.9	0.2	2.9	0.3	2.9
3	GTRB-W-3152	NO _x	Source Removed from Service						
		CO							
		PM							
		SO ₂							
4	GTRB-02-7704A	NO _x	230	9.8	121.5	9.1	118.4	10.2	115.3
		CO	56	2.0	20.6	1.9	22.0	2.1	23.5
		PM	4.6	0.3	3.1	0.2	3.1	0.3	3.0
5	GTRB-02-7704B	NO _x	230	10.2	113.2	10.4	111.3	11.6	109.6
		CO	56	0.3	9.7	0.4	9.6	0.4	9.4
		PM	4.6	0.2	2.7	0.2	2.6	0.2	2.6
		SO ₂	1.5	0.09	1.04	0.10	1.04	0.11	1.01
6	GTRB-02-7529	NO _x	141	4.0	40.5	3.6	40.4	4.3	40.8
		CO	38	0.5	5.3	0.5	5.3	0.6	5.3
		PM	3.2	0.2	2.2	0.2	2.2	0.2	2.2
7	GTRB-02-7504A	NO _x	86	0.0	11.9	0.0	9.2	0.0	9.1
		CO	24	0.0	1.7	0.0	1.6	0.0	1.6
		PM	2.0	0.0	0.4	0.0	0.3	0.0	0.3
8	GTRB-02-7504B	NO _x	86	2.4	27.9	3.1	30.3	4.0	30.7
		CO	24	0.1	2.8	0.2	2.9	0.2	3.0
		PM	2.0	0.1	1.0	0.1	1.1	0.1	1.1
9	B-02-7000	NO _x	21	0.2	9.4	0.5	8.5	1.6	8.7
		CO	5.1	0.0	2.6	0.1	2.3	0.4	2.3
		PM	1.6	0.0	0.6	0.0	0.6	0.1	0.6
10	B-02-7001	NO _x	21	4.5	9.7	3.9	13.7	1.6	15.3
		CO	5.1	1.2	2.6	1.1	3.7	0.4	4.1
		PM	1.6	0.3	0.6	0.2	0.8	0.1	0.9
11	B-02-7002	NO _x	21	1.3	7.9	0.9	7.4	0.0	8.0
		CO	5.1	0.4	2.1	0.2	2.0	0.0	1.6
		PM	1.6	0.1	0.6	0.0	0.4	0.0	0.3

¹ Emission limits for EU IDs 1 and 2 are combined 12-month total emissions.

Total Facility SO₂ Emissions from Fuel Gas Combustion (tons per month) [MSS03 PC 12.1a]

January	February	March	April	May	June
2.04	2.20	2.16	0.00	0.00	0.00
July	August	September	October	November	December
0.00	0.00	0.00	0.00	0.00	0.00

BP Exploration (Alaska) Incorporated
Gathering Center # 2
Prudhoe Bay, Alaska
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Additional Information

1) Monthly fuel sulfur records are listed below. [TVP01 PC 5.1d, 22.3c, MSS03 PC 6.1 & 7.2d]

January						
Date Sample	Sample Facility	Sample Description	Sample Point	Meter Number	Analysis Method	Analysis Result (ppmv)
1/2/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	38
1/28/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	30

February						
Date Sample	Sample Facility	Sample Description	Sample Point	Meter Number	Analysis Method	Analysis Result (ppmv)
2/4/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	32
2/9/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	34
2/18/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	30
2/25/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	35

March						
Date Sample	Sample Facility	Sample Description	Sample Point	Meter Number	Analysis Method	Analysis Result (ppmv)
3/5/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	38
3/10/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	33
3/19/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	30
3/26/2019	GC-2	GC2 Fuel Gas Reg Spile Pt	MEL# SC-02-49501M	5000	H2S, ASTM D4810-88	28

2) No excess emissions were discovered during the reporting period. [TVP01 PC 65.2]

Discovery Date	Date Submitted to ADEC	EU ID
N/A	N/A	N/A

3) No permit deviations were discovered during the reporting period. [TVP01 PC 65.2]

Discovery Date	Date Submitted to ADEC	EU ID
N/A	N/A	N/A

4) No Method 9 observations were conducted during the reporting period. [TVP01 PC 25.1, 27.2a, 27.2c, 30.3a, 30.3c, MSS03 PC 4.1 & 5.1]

EU ID	Number of Observations Days	Highest 5-min Average	Dates when Results Exceeded 20%	Required Monitoring or Recordkeeping Not Completed
N/A	N/A	N/A	N/A	N/A

5) No source test were conducted during the reporting period. [TVP01 PC 21.6a, 21.6b, 27.2b, 30.3b, MSS03 PC 5.1]

6) No public complaints were received during the reporting period. [TVP01 PC 46.5]

Number of Complaints Received	Number of Times Corrective Action was Necessary	Number of Times Actions were Taken within 24 Hours	Status of Necessary Corrective Actions Not Taken within 24 Hours
0	0	N/A	N/A

7) Copies of Excess Emissions and Monitoring Systems Performance reports are provided to ADEC upon submittal to the U.S. EPA.

Copies of any NSPS and NESHAPs reports submitted to the U.S. EPA during the reporting period are attached, if applicable. [TVP01 PC 84.1]

8) No sources listed as insignificant under 18 AAC 50.326(e) had emissions greater than the significant thresholds in 18 AAC 50.326(e) during the reporting period. [TVP01 PC 34.3]

9) The diesel sulfur content did not exceed 0.75% by weight during the reporting period. Therefore, SO₂ emissions for EU IDs 9 through 15 and 18 through 24 are not included. [TVP01 PC 5.2d]

10) GC-2 has completed the six daylight flare observations required by the permit. All flare information is recorded below. [TVP01 PC 31.3, 31.4, MSS03 4.1 & 5.1]

EU ID	Date	Start Time	End Time	Cumulative Flared Gas Volume (MMscf)	Reason for Flaring
27	5/9/2004-5/10/2004	21:10	00:50	0.364	K-7000 Turbine Water Wash
27	5/18/2004	09:20	12:50	0.364	K-7001 Turbine Water Wash
27	8/12/2004	20:00	21:08	0.002	Full plant shut-down for maintenance
27	9/7/2004-9/11/04	16:30	22:35	43.7	Start-up
27	7/10/2004	05:22	08:36	0.333	ESD Testing
27	9/3/2005	8:05	10:00	0.491	ESD Testing

11) The exhaust stack diameters for EU IDs 18 through 20 are 11.8 inches and the diameters for EU IDs 21 through 24 are 3.9 inches, 5.9 inches, 18.1 inches and 47.2 inches, respectively. [TVP01 PC 29]

12) No source testing or visible emission monitoring triggered additional testing or monitoring. [TVP01 PC 65.3]

Date Additional Testing or Monitoring was Triggered	Equipment Involved	Permit Condition Affected	Result which Triggered Additional Testing or Monitoring
N/A	N/A	N/A	N/A

13) There were no known Subpart ZZZZ deviations during the reporting period. [40 CFR 63.6650(f)]

GPB LABORATORY REPORT

907-659-5654

AKOPSLabIntertek@bp.com

Sample Information

Sample ID Number: PD55141
Sample Facility: COTU
Collection Date/Time: 01/10/2019, 12:10 AM
Sample Point: COTU Sales DieseTank F-11
Sample Description: Sales Diesel
Sample Type: Diesel
Well Number:

Results

<u>Analysis Name</u>	<u>Result</u>	<u>Units</u>
Sulfur	0.0752	Wt%

Analyzed by: P2JAW9

Sample Comment:

Report Date: 1/10/2019, 2:58:15PM

GPB LABORATORY REPORT

907-659-5654

AKOPSLabIntertek@bp.com

Sample Information

Sample ID Number: PD56343
Sample Facility: COTU
Collection Date/Time: 2/13/2019
Sample Point: COTU Sales Diesel Tank
Sample Description: Sales Diesel
Sample Type: Diesel

Results

<u>Analysis Name</u>	<u>Result</u>	<u>Units</u>
Sulfur	0.0754	Wt%

GPB LABORATORY REPORT

907-659-5654

AKOPSLabIntertek@bp.com

Sample Information

Sample ID Number:	PD57192
Sample Facility:	COTU
Collection Date/Time:	03/10/2019, 12:00 AM
Sample Point:	COTU Sales Diesel Tank F-11
Sample Description:	Sales Diesel
Sample Type:	Diesel

Results

<u>Analysis Name</u>	<u>Result</u>	<u>Units</u>
Sulfur	0.0755	Wt%

Analyzed by: P2JAW9

Report Date: 3/11/2019, 8:51:54AM